

Reply to Office Action and Amendment under 37 CFR §1.116  
Serial No. 09/393,482

Page 5

In the Office Action of October 22, 2001, the Examiner rejected independent Claims 1, 11 and 12 and dependent Claims 2-5 under 35 U.S.C. §102(b) as being anticipated by Joseph et al., U.S. Patent 5,387,016. In a subsequent Advisory Action dated January 9, 2002, the Examiner noted that the arguments presented in the initial reply under 37 CFR §1.116 would be more convincing if the claims were directed to a method in which one of the steps was to establish a peak crimp force. Since the claims under consideration are apparatus claims, the undersigned attorney has taken the Examiner's comments into consideration and amended the independent apparatus claims to positively recite structure which establishes an area of peak crimp force. Accordingly, the undersigned attorney respectfully traverses the Examiner's rejection under 35 U.S.C. §102(b) in view of the amendments presented herein and submitted herewith as well as the following argument.

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. §102 is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents, functioning in substantially the same way to produce substantially the same results. As most recently noted by the Court of Appeals of the Federal Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick*, 221 USPQ 481, 485 (1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. §102, the Court stated:

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim."

Applicant's independent Claim 1 as amended now requires:

D

Reply to Office Action and Amendment under 37 CFR §1.116  
Serial No. 09/393,482

Page 6

1. A reinforced hose coupling defining an area of peak crimp force of a predetermined longitudinal extent, said reinforced hose coupling comprising:

an inner sleeve having a first end, a second end opposite said first end, and a pair of annular upset beads therebetween, said inner sleeve further having an inner diameter and an outer diameter thereon, said outer diameter having at least one projection thereon;

a hose having an inner diameter positioned over said outer diameter of said inner sleeve, said at least one projection of said inner sleeve interlocking with said hose to resist axial movement of said hose relative to said reinforced hose coupling;

an outer sleeve having a terminating end sandwiched between said pair of annular upset beads of said inner sleeve to prevent axial movement relative to said inner sleeve, said outer sleeve further having an inner diameter circumscribing said hose, said inner diameter of said outer sleeve further including at least one depression therein formed by a crimping operation, said at least one depression defining an area of peak crimp force of a predetermined longitudinal extent and interlocking with said hose to further resist axial movement of said hose relative to said reinforced hose coupling; and

at least one reinforcing ring positioned within said inner diameter of said inner sleeve within said predetermined longitudinal extent defined by said area of peak crimp force, whereby said at least one reinforcing ring provides localized support along said predetermined longitudinal extent to resist deformation of said inner sleeve during said crimping operation.

Applicant's independent Claim 11 as amended requires:

11. A reinforced hose coupling defining an area of peak crimp force of a predetermined longitudinal extent, said reinforced hose coupling comprising:

a hose having an outer diameter and an inner diameter;

an outer sleeve having an inner diameter circumscribing said outer diameter of said hose, said outer sleeve further having a plurality of depressions therein, said plurality of depressions defining an area of peak crimp force of a predetermined longitudinal extent and interlocking with said

D

Reply to Office Action and Amendment under 37 CFR §1.116  
Serial No. 09/393,482

Page 7

hose to resist axial movement of said hose relative to said outer sleeve;

an inner sleeve having an inner diameter and an outer diameter, said inner sleeve being adapted to be inserted into said inner diameter of said hose said inner sleeve having at least one projection interlocking with said hose to resist axial movement of said hose relative to said inner sleeve; and

at least one reinforcing ring situated within said inner diameter of said inner sleeve, within said predetermined longitudinal extent defined by said area of peak crimp force, whereby said at least one reinforcing ring provides localized support along said predetermined longitudinal extent to resist deformation of said inner sleeve.

Applicant's independent Claim 12 as amended requires:

12. A reinforced hose coupling defining an area of peak crimp force of a predetermined longitudinal extent, said reinforced hose coupling comprising:

a hose having an outer diameter and an inner diameter;

an outer sleeve having an inner diameter circumscribing said outer diameter of said hose, said outer sleeve further having at least one depression therein, said at least one depression defining an area of peak crimp force of a predetermined longitudinal extent and interlocking with said hose to resist axial movement of said hose relative to said outer sleeve;

an inner sleeve having an inner diameter and an outer diameter, said inner sleeve being adapted to be inserted into said inner diameter of said hose said inner sleeve having at least one projection interlocking with said hose to resist axial movement of said hose relative to said inner sleeve; and at least one reinforcing ring situated within said inner diameter of said inner sleeve, within said predetermined longitudinal extent defined by said area of peak crimp force, whereby said at least one reinforcing ring provides localized support along said predetermined longitudinal extent to resist deformation of said inner sleeve.

Joseph et al. do not disclose a reinforcing ring positioned within a predetermined longitudinal extent as defined by an area of peak crimp force as required

D

Reply to Office Action and Amendment under 37 CFR §1.116  
Serial No. 09/393,482

Page 8

by Applicant's amended independent Claims 1, 11 and 12. Joseph et al. disclose a tubular lining that extends throughout the entire region of a tubular body to which a crimp force could be applied such that the tubular body is supported at any position that is crimped. Applicant structurally replaces the elongated tubular liner disclosed in Joseph et al. with a discrete reinforcing ring located in the predetermined longitudinal extent defined by an area of peak crimp force to obviate the structural shortcomings of Joseph et al. set forth in the background of the invention. As the area of peak crimp force differs for each coupling, Applicant must predetermine the longitudinal extent defined by the defined area of peak crimp force in order to establish the proper location for the reinforcing ring. The fact that the area of peak crimp force differs for each coupling is not significant to the Joseph et al. disclosure because the elongated tubular liner supports the entire region to which a crimp may be applied. Joseph et al. do not disclose a predetermined area of peak crimp force because such information is not important to the invention.

Joseph et al. do not have a reinforcing ring that provides localized support along a predetermined longitudinal extent as required by Applicant's amended independent Claims 1, 11 and 12. As previously indicated in the description of the prior art, Joseph et al. disclose a tubular lining that extends throughout the entire region of the connection to which a crimp force could be applied. The support element in Joseph et al. is not localized along a predetermined longitudinal extent defined by an area of peak crimp force.

D

Reply to Office Action and Amendment under 37 CFR §1.116  
Serial No. 09/393,482

Page 9

In view of the foregoing remarks, the undersigned attorney respectfully submits that Joseph et al. do not teach or suggest Applicant's invention. Specifically, Joseph et al. do not teach or suggest providing localized support along a predetermined longitudinal extent defined by an area of peak crimp force.

Therefore, in applying the test for anticipation as set forth in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick*, supra, Joseph et al. do not anticipate independent Claims 1, 11 or 12. Further, under principles of claim dependency, Joseph et al. do not anticipate dependent Claims 2-5 either. Accordingly, withdrawal of the rejection of Claims 1-5, 11 and 12 under 35 U.S.C. §102 is respectfully requested.

In view of the foregoing remarks, the undersigned attorney respectfully submits that Joseph et al. do not teach or suggest Applicant's invention. Specifically, Joseph et al. do not teach or suggest providing localized support along a predetermined longitudinal extent defined by an area of peak crimp force.

The undersigned wishes to express his appreciation to the Examiner for the indication that Claims 6-10 are allowed and for the notation in the Advisory Action as well as for entertaining a Supplemental Rule 1.116 Reply. In view of the finality of the above referenced Office Action, every effort has been made to resolve all issues pending in this application. Accordingly, it is respectfully requested that the Rule 1.116 Reply of December 21, 2001 and this Supplemental Response be entered to correct all formalities and place the claims in condition for allowance. In the event the Examiner is not

D

Reply to Office Action and Amendment under 37 CFR §1.116  
Serial No. 09/393,482

Page 10

persuaded of the patentability of the claims as amended herein, she is respectfully requested to enter this amendment for purposes of appeal.

In accordance with the provisions of 37 CFR §1.121, a copy of the claims as currently pending in the application, omitting all bracketed text and underlining, is included herewith as Exhibit A.

If the Examiner has any questions with respect to any matter now of record, Applicant's attorney may be reached at (248) 362-1210.

Respectfully submitted,

VANOPHEM & VANOPHEM, P.C.

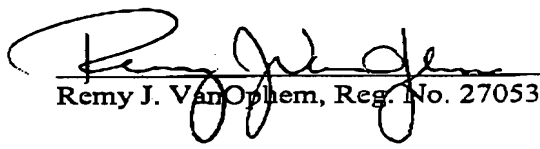
755 W. Big Beaver Rd.  
Suite 1313  
Troy, MI 48084  
(248) 362-1210  
Attorney Docket No. FTP139A US

Remy J. VanOphem  
Attorney for Applicant  
Registration No. 27053

Certificate of Facsimile Transmission

I hereby certify that this correspondence is being filed with the United States Patent Office by facsimile transmission to Examiner Teri Luu at facsimile number (703) 305-3978, on January 18, 2002.

Date: January 18, 2002

  
Remy J. VanOphem, Reg. No. 27053

D